REMARKS/ARGUMENTS

Claims 1-9, 11-24, 26-38, 40-46 and 48-50 stand in the present application, claims 1, 17, 49 and 50 having been amended. Reconsideration and favorable action is respectfully requested.

All outstanding rejections alleging anticipation by McMahon and/or "obviousness" based on McMahon taken in view of additional prior art references are respectfully traversed.

The Examiner is respectfully requested to again review the arguments *vis-à-vis* McMahon submitted June 21, 2010 and July 19, 2010, because they are all believed to be substantively correct in distinguishing the present claims over McMahon. In any event, as noted above, independent claims 1, 17, 49 and 50 have been further amended to emphasize patentable distinctions over McMahon.

In the Office Action at page 28 the Examiner states: "In response to arguments A and B, the arguments appear to hinge on the lookup table being used regardless of whether the level contains any free segments ... [this] is not found in the claim limitations."

Applicant has amended the independent claims to more clearly require this distinction. For example, amended claim 1 now clearly requires "always determining a lookup table entry associated with the most significant bit, and determining from said

lookup table entry a lowest of said levels containing a segment of a size equal to or larger than the requested memory block regardless of whether said lowest level contains a free segment of a size equal to or larger than the requested memory block." Similar amendments have been made to independent claims 17, 49 and 50. This is in clear contrast to McMahon. In McMahon, the master bit map index is used to identify the appropriate group (level) that "contains some non-empty free lists" (i.e., at least one memory block is available) (see 7:59-62).

Thus, the approaches are different, and the results also differ (unless the lowest level happens to contain a free segment). In other words, it is not an example where a specific feature takes away the novelty of a more generic feature. Accordingly, the present claims are now believed to more clearly patentably define over McMahon on this basis alone.

The Examiner further alleges that "the Applicants have kindly pointed out at least in some cases, it is done based on the most significant bit." To the contrary, as pointed out in the last response, McMahon contains no explicit or implicit disclosure of "determining from the lookup table entry associated with the most significant set bit" as asserted by the Examiner. The Examiner was respectfully requested to identify this alleged disclosure in McMahon or to withdraw the objection, but has failed to do so.

More particularly, regarding Table 1 in McMahon, the Examiner had stated that in order to decide whether to use the first or second free list for a 32 byte request, the

most significant bit would have to be used. Applicants stated that it was doubtful that it "would have to be used", and speculated that in a particular example it could be used to make the decision, but even then this modified speculation involving McMahon would not be operative, and would certainly not teach or suggest Applicants' claimed invention.

In particular, an example was provided that pointed out the deficiencies of McMahon. Namely, if the request is 48 bytes (rounded up from, say, 33 bytes), the most significant bit is still the same as that of a 32 byte request (32 bytes = 100000; 48 bytes = 110000) but for a 48 byte request, "free list 3" instead of "free list 2" would be required. Thus, clearly, using McMahon the appropriate free list cannot be determined on the basis of the most significant bit. Instead, in this example, the second most significant bit (or other information) has to be taken into account.

Applicants' speculation that even if McMahon was operated in accordance with the Examiner's alleged and wholly unsupported contention it would not be operative, does not obviate the requirement that the Examiner specify where McMahon supports the Examiner's contention. See MPEP 706. Accordingly, the present claims are believed to patentably define over McMahon for this additional reason.

In response to argument D, the Examiner relies on Table 1 of McMahon stating that each free list contains blocks of a specific size. However, the amendments to the

present claims obviate the Examiner's ability to rely on this disclosure to reject the present claims.

As explained above, the present claims differ from McMahon in at least the following features:

- each bit of the binary data set that indicates the size of a requested memory segment is associated with an entry of the lookup table
- determining from the lookup table a lowest level containing a segment of a size equal to or larger than the requested memory block (regardless of whether or not the segment is free)
- making that determination on the basis of the most significant bit of the binary data set that indicates the size of a requested memory segment.

Since the other cited art does not solve the deficiencies of McMahon, the present claims patentably define over the cited art taken singly or in any combination. Accordingly, this entire application is believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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